

2. (Original) The apparatus according to claim 1, wherein the wireless communications system comprises a satellite communications system including an earth-based gateway, a satellite, and a user terminal, and said frequency correction apparatus is located at said earth based gateway.

3. (Currently Amended) A system for frequency correcting transmissions between first and second transceivers in a wireless communications system to minimize Doppler frequency effects, comprising:

carrier generating means in the first transceiver for generating a carrier signal oscillating at a rate responsive to a Doppler compensation signal ~~first input~~;

q3 Doppler compensation means coupled to said carrier generating means for generating a said Doppler compensation signal; and

clock generating means coupled to a clock input of said Doppler compensation means for generating a clock signal oscillating at a rate responsive to a rate input ~~predetermined rate~~; and

rate input means coupled to said clock generating means for adjusting said rate input ~~and adjustable~~ over time according to a predetermined sequence so that said Doppler compensation signal compensates for said Doppler effect.

4. (Original) The system according to claim 3, wherein the wireless communications system comprises a satellite communications system including an earth-based gateway incorporating the first transceiver, a satellite incorporating the second transceiver, and a user terminal.

5. (Currently Amended) A method for frequency correction of Doppler effects in a wireless communications system, comprising:

generating a carrier signal oscillating at a rate responsive to a Doppler compensation signal ~~first input~~;

generating a said Doppler compensation signal based on a clock signal;

generating a said clock signal oscillating at a rate responsive to a rate input; and

adjusting said rate input over time according to a predetermined sequence so that said Doppler compensation signal compensates for said Doppler effect.